

Skeletal Animation in D-Flow

Software Required:

- 3DS Max
- OgreMax Plugin
- D-Flow

Inside of 3DS Max the character or asset should be skinned just as you would any other mesh. Here is a basic guide on how to do this for those unaware:

http://www.3dtotal.com/index_tutorial_detailed.php?id=1774#.U5W7PaxYKZg

With a Skinned character you should animate it using key-frame animation as you would any other mesh.

Now the character has a rig and an animation it is possible to export the mesh for use inside of the D-Flow software. In order to load assets in D-Flow they must be in either the .scene or .mesh file formats which are created via the use of the OgreMax exporter plugin for 3DS Max. This plugin is installed on each of the PC's in 1.125A *(Correct at time of writing)*

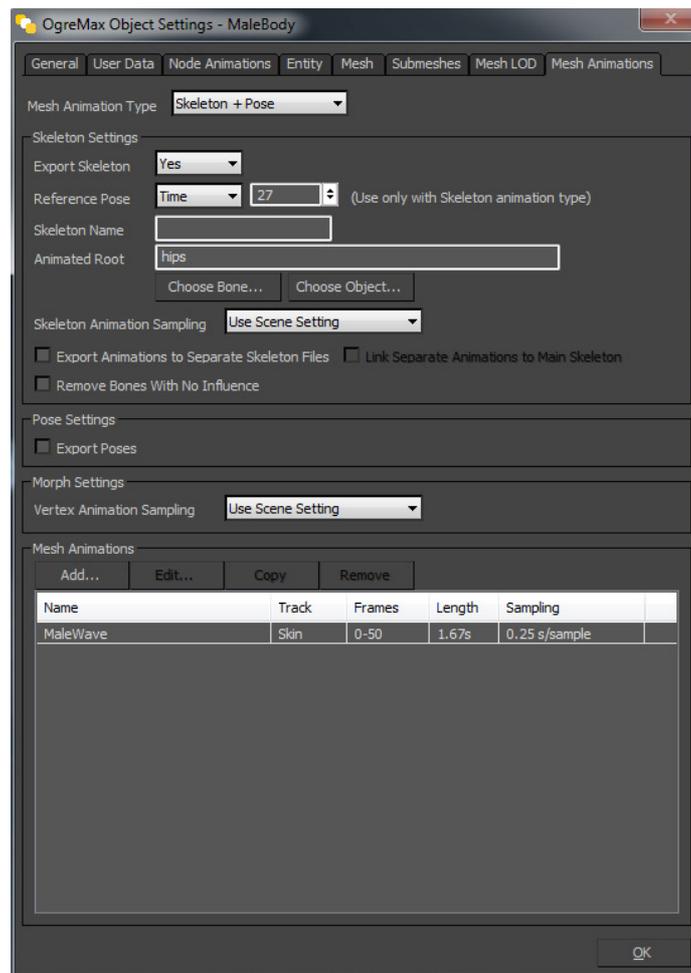
With the animated asset selected you must select the OgreMax menu at the top of the viewport and enter the '**Object Settings**' portion. This will display a new popup menu which has a variety of different tabs available. Many of these are not required however there are a few which are useful. For information about the non-Animation tabs see this guide:

http://moodle.port.ac.uk/pluginfile.php/184335/mod_folder/content/0/3dsMax%20to%20DFlow%20Export%20Guide.pdf?forcedownload=1

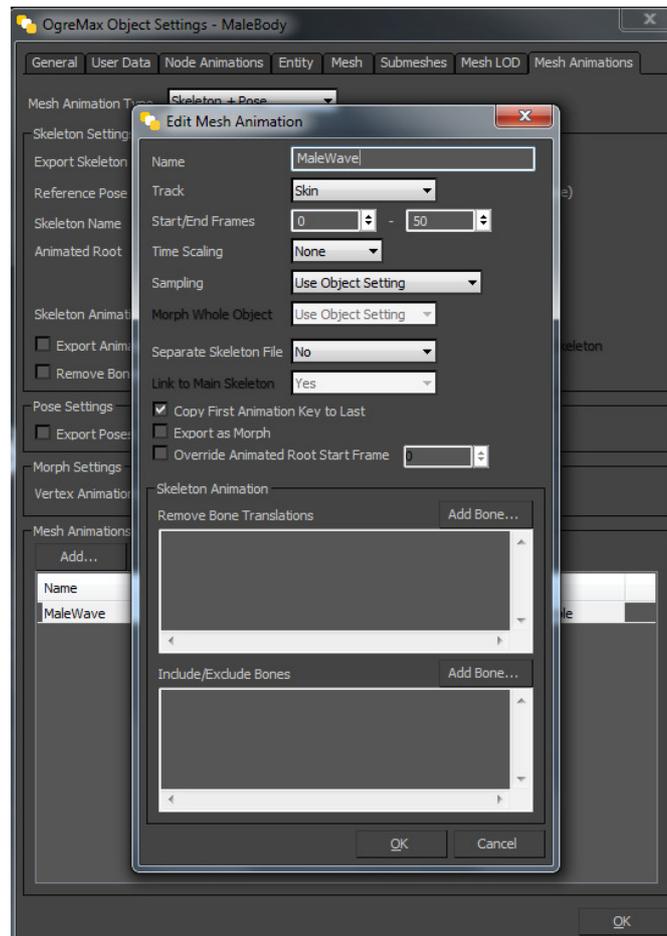
The final tab in this window is **'Mesh Animation'** which enables you to set the variables relating to the exporting of the animation files. This tab is split into four segments: Skeleton Settings, Pose Settings, Morph Settings and Mesh Animations. Only the Skeleton Settings and Mesh Animations are needed to export Skeletal animations into D-Flow.

Inside of this tab the **'Mesh Animation Type'** should be set to **'Skeleton + Pose'** and the **'Export Skeleton'** set to **'Yes'**. The **'Reference Pose'** option allows you to change the initial pose which the mesh is exported as into a different frame from the timeline.

'Export Animations to Separate Skeleton Files' should NOT be ticked as this causes issues when attempting to bring the animation into D-Flow.



Under the Mesh Animation Segment you can set the animations which will be created. This is done in order to create the animation files which are used by D-Flow. Pressing **'Add'** will open a new window with settings relating to the current animation. Set a Unique name for the animation and set the track to **'Skin'** to enable the use of the rig which has been applied to the character. The Start and End frames are used to select the total area of Key-frames which comprise the animation. The **'Separate Skeleton File'** should be set to **'No'** otherwise the actual animation will be exported as a separate file instead of being inbuilt into the .mesh, causing issues inside of D-Flow.



With these settings complete you may close the OgreMax windows and ensure the mesh is selected. Then again using the OgreMax dropdown menu choose **'Export'** and then **'Export Selected'** and change the file type to .mesh. This will give you 3 different files, a .material, a .mesh and a .skeleton for the current object.

These objects should be placed inside of a folder in the C:\Caren-Resources\Scenes D-Flow installation location.

Now the mesh can be loaded into a D-Flow project by selecting load scene and changing the file type to **.mesh** rather than **.scene**. This will load the mesh into the scene and allow you to drag the object from the content browser into the main D-Flow application. However instead of dragging the overall object, click the small + symbol to the left of the object name and drag the individual mesh into the main window instead. This will enable you to activate the animation through double clicking on the object icon.

